

**CHANNEL ISLANDS NATIONAL MARINE SANCTUARY
SANCTUARY ADVISORY COUNCIL**

MEETING MINUTES

**Wednesday May 23, 2001
12:00 – 5:15 pm *and* 6:30 – 10:00 pm**

Victoria Hall, Santa Barbara, CA

In Attendance:

GOVERNMENT REPRESENTATIVES:

NATIONAL PARK SERVICE

Member Jim Shevock

Alternate Gary Davis

NATIONAL MARINE FISHERIES SERVICE

Member Mark Helvey

Alternate Christina Fahy

US COAST GUARD

Member Lt. Yuri Graves

MINERALS MANAGEMENT SERVICE

Alternate Fred Piltz, Ph.D.

US NAVY

Alternate Ron Dow

CA DEP'T. OF FISH & GAME

Member Patricia Wolf

Alternate LT. Jorge Gross

CALIFORNIA RESOURCES AGENCY

Member Brian Baird

Alternate Melissa Miller- Henson

CALIFORNIA COASTAL COMMISSION

Member Rebecca Roth

COUNTY OF SANTA BARBARA

Member Dianne Meester

Alternate Jackie Campbell

COUNTY OF VENTURA

Member Lyn Krieger

Alternate Jack Peveler

COMMUNITY REPRESENTATIVES:

TOURISM

Member Jeanette Webber

Alternate Alex Brodie

RECREATION

Member Jim Brye

BUSINESS

Member Rudy Scott

Alternate Dr. Dan Secord

CONSERVATION

Member Linda Krop

Alternate Greg Helms

FISHING

Member Bruce Steele

Alternate Eric Hooper

EDUCATION

Alternate Kathy deWet-Oleson

RESEARCH

Member Dr. Robert Warner

Alternate Matthew Cahn

PUBLIC AT-LARGE

Member Jon Clark

PUBLIC AT-LARGE

Alternate Robert Duncan

PUBLIC AT-LARGE

Member Craig Fusaro, Ph.D.

Alternate Roberta Cordero

NON-VOTING MEMBERS:

**CHANNEL ISLANDS NATIONAL
MARINE SANCTUARY**

LCDR Matthew Pickett, Manager

**MONTEREY BAY NATIONAL
MARINE SANCTUARY**

William Douros, Superintendent

Absent:

GOVERNMENT REPRESENTATIVES:

US COAST GUARD

Alternate Adam Birst

MINERALS MANAGEMENT SERVICE

Member Drew Mayerson

US NAVY

Member Alex Stone

CALIFORNIA COASTAL COMMISSION

Alternate Gary Timm

COMMUNITY REPRESENTATIVES:

RECREATION

Alternate Bill Kendig

EDUCATION

Member Larry Manson

PUBLIC AT-LARGE

Alternate Barry Schuyler

PUBLIC AT-LARGE

Member Marla Daily

NON-VOTING MEMBERS:

**GULF OF THE FARALLONES/CORDELL BANK
NATIONAL MARINE SANCTUARIES**

Ed Ueber, Manager

1. Administrative Items and Announcements

A. Call to Order and Roll Call

At roll call, 20 of the 20 voting seats were represented, and two of the three non-voting seats. There was a total of 34 SAC representatives in attendance for the day (16 members, 16 alternates, 2 non-voting reps).

Public attendance at the meeting varied, peaking at approximately 300 individuals during the evening Public Forum.

B. Introductory remarks

SAC Chair Dianne Meester welcomed everyone and provided a brief overview of the agenda.

C. Meeting minutes

The Council unanimously approved the February 9th SAC meeting minutes. June 19 was set by the Council as a deadline for offering comments on draft minutes of the March 14th SAC meeting, which were distributed at the meeting.

D. SAC Seats

Dianne Meester announced the following changes in membership on the SAC:

- Larry Manson (not present) has been appointed as Education member.

- Kathy deWet-Oleson has been appointed as Education alternate. Kathy introduced herself, and described her appreciation at being selected to join the SAC. Kathy explained her background in marine education, her familiarity with the Channel Islands, and her underwater photography work, including documentation of black seabass at Anacapa Island.
- Dr. Robert Warner (not present until later) has been appointed as Research member.
- Walt Schobel has been appointed by Vandenberg Air Force Base as the SAC's Department of Defense (DOD) alternate. This appointment will become effective as of the June 19th SAC meeting. Dianne Meester added that Ron Dow with the Navy has done a great job as the DOD alternate, and thanked him for his service on the SAC.
- Rebecca Roth has been appointed to the California Coastal Commission member seat. Rebecca introduced herself to the Council, described her interest in the SAC and commented on her work for the Coastal Commission as the Federal Programs Manager. Dianne Meester added that Gary Timm (former SAC member for the Coastal Commission seat) will now serve as the alternate to Rebecca.

2. Manager's Report

In the interest of saving time, Matt Pickett reviewed only one item from the Manager's Report: response by the National Marine Sanctuary System to the Navy's proposal to operate SURTASS LFA sonar in and near National Marine Sanctuaries. Matt suggested that the SAC review one of the letters attached to the Manager's Report, which was from the National Marine Sanctuary System to the Navy and addressed a number of concerns regarding the proposed LFA sonar project.

3. Acknowledgement of Key Participants in the Marine Reserves Process

SAC Chair Dianne Meester and MRWG Co-Chairs Matt Pickett and Patty Wolf, thanked the Marine Reserves Working Group, Science Advisory Panel, and Socio-Economic Panel for their efforts and contributions over the past two years. Plaques were given to each participant present from each of the three groups.

4. Facilitators Report on MRWG Process

John Jostes provided a "Facilitator's Report" presentation on the MRWG. John stepped the Council through highlights found in the 37-page report (distributed to all SAC members), highlighting significant areas of consensus agreement achieved and disagreement encountered by the MRWG.

The slides John presented were as follows:

Lack of Consensus ≠ Failure of the Process

Substantive Areas of Agreement:

- Ground Rules
- Mission Statement
- Problem Statement
- Issues of Concern
- Goals and Objectives
- Implementation Recommendations

Ground Rules and Consensus

Consensus Defined: Consensus is a process used to find the highest level of agreement without dividing the participants into factions. Everyone in the group supports, agrees to, or can accept a particular decision. In the end, everyone can say “whether or not I prefer this decision, above all others, I will support it because it was reached fairly and openly.”

When unable to support a consensus, a member has an obligation to demonstrate that the item at issue is a matter of such principle or importance that his or her constituents' interests would be substantially and adversely affected by the proposed decision.

Problem Statement:

- Enhanced the legitimacy of the process;
- Encouraged collaboration among a broad alliance of interests;
- Engaged stakeholders and their constituencies in the process;
- Served as a “touchstone” for productive dialogue;
- Identified the implications of non-agreement and maintaining the “status quo”
- Established a focus on the future of the Channel Islands marine ecosystem;
- Framed the problem to be addressed; and
- Minimized misinterpretations regarding the purpose for collaborating.

Issues of Concern:

- Companion Piece to Problem Statement
- Link to Goals and Objectives

Goals and Objectives:

Developed to answer the questions of:

- “what” is the desired future state of the Channel Islands marine ecosystem,
- “what” are the measurable outcomes for evaluating progress and success in moving toward that future desired condition.

Defined as:

Goal: A broad statement about a long-term desired outcome that may, or may not be completely obtainable.

Objective: A measurable outcome that will be achieved in specific timeframe to help accomplish a desired goal.

Substantive Goals:

Ecosystem Biodiversity Goal: To protect representative and unique marine habitats, ecological processes, and populations of interest.

Socio-Economic Goal: To maintain long-term socioeconomic viability while minimizing short-term socioeconomic losses to all users and dependent parties.

Sustainable Fisheries Goal: To achieve sustainable fisheries by integrating marine reserves into fisheries management.

Natural and Cultural Heritage Goal: To maintain areas for visitor, spiritual, and recreational opportunities which include cultural and ecological features and their associated values.

Education Goal: To foster stewardship of the marine environment by providing educational opportunities to increase awareness and encourage responsible use of resources.

Implementation Recommendations:

Monitoring, Evaluation, and Assessment Recommendations:

- For Biodiversity
- For Fisheries Management
- For Socioeconomic Impacts
- For Data Management

Reserve Administration Recommendations:

- Agency Coordination and Accountability
- Community Oversight
- Funding
- Enforcement
- Education Recommendations

Outstanding Unresolved Issues:

- What the MRWG could not agree upon:

- Size of Reserves:
- Location of Reserves:
- Use of “Limited Take” areas to compliment or substitute for “No Take” Reserves:
- Relative Weighting of Advice from Science Panel and Socioeconomic Team
- Phasing of Reserves:
- Integration of Fisheries Management Outside Reserves

- What are the competing interests underlying those issues?

Process Observations and Accomplishments:

- Framed the policy issues surrounding marine reserves;
- Adopted protocols for collaborative problem solving;
- Improved working relationships among disparate interest groups;
- Reached a series of step-wise agreements;
- Built consensus regarding the potential value and benefits of marine reserves;

- Narrowed of original differences over the acceptable size of marine reserves.
- Identified areas of overlap where marine reserve(s) could be located.
- Engaged in public education and stakeholder outreach with regard to the scientific, political and socioeconomic issues

Principles Embodied in Process:

- Diversity of Representation
- Commitment of the Participants to the Process
- Ability to Respond to a Loss of Membership
- Process Flexibility
- Use of Advisory Panels
- Strategic Use of Public Comment/Input
- Stakeholder Understanding of the Science and User Profiles
- Behind Marine Reserves
- Stakeholder/Constituent Outreach
- Need for Process Evaluation

Added Value as viewed by MRWG:

- From consideration to action
- Everyone got smarter
- Building consensus requires an exceptional amount of work
- The end of our process will be where others start
- Created a broader knowledge base
- Better working relationships

Council discussion immediately following John's report raised a number of questions.

Brian Baird asked John if he felt the MRWG could have achieved complete consensus if they had been given more time. John replied that, in his opinion, they could not have reached consensus on the location of reserves, period. The challenge, John added, now falls to the SAC.

Linda Krop suggested that the Facilitator's Report might benefit from a more clear explanation of the final MRWG map. There is a need to understand what this map is, and what it isn't. Linda also suggested that the report should contain a summary from the Science Panel on their work.

Jeanette Webber asked if the Socio-Economic Panel had been given a chance to review the MRWG's final composite map. John replied that because the final MRWG map did not represent completed proposals, no analysis had been done. Jeanette suggested that such an analysis might be helpful, nonetheless.

Kathy deWet-Oleson described how she witnessed the MRWG negotiate which areas around Anacapa Island could be accepted as marine reserves, and expressed disappointment in the approach. She noted that the approach used by the MRWG to determine the "areas of overlap"

around Anacapa Island seemed to be inconsistent with the description contained within the Facilitator's Report concerning how the MRWG operated.

Bill Douros commented that the marine reserves process has been unprecedented in its comprehensiveness. Bill also commented that John's recap on the MRWG seemed primarily process related, and he wondered if the group was going to be able to learn more about the negotiations and trade-offs related to specific mapped areas. He asked if a summary of mapped reserve areas and the benefits and problems related to them would be delivered. Without maps and place-based details, he wondered how the SAC was supposed to move forward on this. John Jostes suggested that it would be very difficult for the SAC to work on mapping. He suggested further that perhaps the SAC could develop advice on how to balance the differences encountered by the MRWG. Bill added that he thought MRWG members might want their area-specific work to be passed forward rather than being lost.

Patty Wolf offered further clarification on what the "areas of overlap" and "areas of non-overlap" were on the MRWG's final composite map. Areas of overlap, she said, are not necessarily areas that "should" be included in a reserve, but rather areas that "could" be included in a reserve.

Patty Wolf also commented that it would be very difficult for the SAC to try to do what the MRWG could not do in two years. She reminded the SAC that many have not been involved with the MRWG's work. She agreed with John Jostes that the SAC's best role at this stage is to try to help the decision-makers at the next stage.

Matt Pickett reminded the SAC that the Science Panel and the Socio-Economic Panel had already provided analyses on previously developed MRWG maps (e.g., A-E, and I).

Bruce Steele said that John's report was accurate, that he couldn't find a hole in it, and that "that's what went down."

John Jostes thanked the MRWG and the SAC, and reminded the Council that the process was a success.

5. Report on Public Involvement in MRWG Process

Sean Hastings provided the Council with a brief report on the role of the public in the MRWG process. Sean shared some copies of a draft Print Media Coverage report that included 55 articles written about the marine reserves process since January 2000. Sean noted that the combined number of "impressions" (number of stories multiplied by circulation of paper) from this media coverage was over 14 million. The draft Print Media Coverage report, Sean said, would be updated as the process advanced.

Sean also explained that the public participation in the marine reserves process had been extensive. He noted the very large turnouts at public forums.

Concerning written comments, Sean stated that over 9000 written comments had been received to date, and noted the unprecedented level this represented for any Sanctuary process. Sean

explained that the bulk of the written comments are from California and the tri-county region. The remainder, he said, are from 47 states and a few foreign countries. He noted that such broad national interest underscores the significance of the site being a *national* marine sanctuary.

Mark Helvey asked Sean for the breakdown of supportive and opposing comments received. Sean replied that it depends on what you regard as “opposing,” noting that some comments reflected complete opposition to reserves, while many others called for “smaller” reserves. Sean referred Mark and others to a one-page handout contained in the SAC meeting packet, which contained some tally figures.

Patty Wolf asked Sean if he could comment on the number or extent of form letters, chain e-mails, or other mass mailing campaigns utilized. Sean commented that both supportive and opposing views were expressed, to some extent, via these types of approaches, but he did not have specific numbers on it.

6. Science Advisory Panel Report

Satie Airame provided a presentation to the SAC that recapped the Science Advisory Panel’s involvement in the marine reserves process. In her presentation, Satie highlighted: the “ecosystem/biodiversity” and “sustainable fisheries” goals given to the Science Advisory Panel (SAP) by the MRWG; the ecological framework used by the SAP to develop recommendations; the approach taken by the SAP to establish optimal size ranges to recommend for reserves; the difference between sizing of reserves for fisheries sustainability vs. biodiversity conservation; how the SAP evaluated reserve location factors (i.e. biogeographic provinces, connectivity, depth, coastline types, sediment types, vulnerable habitats, species of interest to the MRWG, existing monitoring sites); the modeling used by the SAP to generate ranges of “solutions” for optimal placement of reserves. Regarding the role of the SAP in reviewing draft maps developed by the MRWG, Satie explained how the scientists analyzed maps A, B, C, D, E, and I, including suggested improvements the SAP had suggested to the MRWG. Satie concluded by showing and explaining summary slides that compared the SAP analysis of all six MRWG maps.

Satie presented the following slides [text-based slides presented here; see www.cinms.nos.noaa.gov for full presentation]:

Benefits of Marine Reserves

Results from 76 studies of marine reserves, worldwide:

Biomass of target species:	2.5 times larger
Abundance of target species:	2.0 times larger
Size of target species:	1.3 times larger
Species diversity:	1.3 times larger
Time to realized benefits:	2-5 years

MRWG Ecosystem Biodiversity Goal for Marine Reserves

To protect representative and unique marine habitats, ecological processes, and populations of interest in the Channel Islands National Marine Sanctuary.
- marine habitats

- populations of interest
- ecological processes

MRWG Socioeconomic Goal for Marine Reserves

To maintain long-term socioeconomic viability while minimizing short-term socioeconomic losses to all users and dependent parties.

MRWG Sustainable Fisheries Goal for Marine Reserves

To achieve sustainable fisheries by integrating marine reserves into fisheries management.

Ecological Framework (utilized by the Science Advisory Panel)

1. Reserve Size
2. Human Threats and Natural Catastrophes
3. Biogeographical Representation
4. Connectivity
5. Habitat Representation
6. Vulnerable Habitats and Species
7. Monitoring Sites

Establishing Targets:

- The best available science demonstrates that the minimum area set aside should be no lower than 30%, and perhaps at 50%, of representative and unique marine habitats and populations of interest in the Channel Islands National Marine Sanctuary.

Human Threats and Natural Catastrophes:

- potential oil spill
- sea floor disturbance
- hurricanes/large storms
- El Nino/Southern Oscillation
- point source or non-point source pollution

Biogeographic Representation and Similarity

- Californian Province
- Transition Zone
- Oregonian Province

Connectivity

(map of upwelling synoptic state; currents)

Habitat Representation

- Substrate
 - Hard bottom
 - Soft bottom
- Depth
 - Photoc Zone
 - Shallow Continental Shelf
 - Deep Continental Shelf
 - Continental Slope
- Exposure

- High
- Low
- Depth
- Photic Zone (0-30 m)
- Shallow Continental Shelf (30-100 m)
- Deep Continental Shelf (100-200 m)
- Continental Slope (>200 m)

Vulnerable Habitats

- Giant Kelp (*Macrocystis pyrifera*)
- Eelgrass (*Zostera* spp.)
- Surfgrass (*Phyllospadix* spp.)

Species of Interest (mapped examples)

- Breeding seabird colonies
- Marine mammal haul-outs

Monitoring Sites

(map of kelp forest monitoring sites)

The “Summed” Solution

- The number of times each planning unit was included in a final solution.

Summary of Ecological Analysis (for Maps A-D & I):

Ecological Criteria	A	B	C	D	E	I
Biogeographical Representation	●	●	●		●	
Catastrophic Events	●	●				
Habitat Representation	●	●	●		●	
Vulnerable Habitats	●	●	●		●	
Monitoring Sites		●	●		●	
Connectivity	●	●	●		●	
Biodiversity Conservation	●	●	●	●	●	●
Fisheries Management		●	●		●	

After Satie’s presentation, the SAC asked several questions.

Robert Duncan asked for a clarification on the 30-50% size recommendation made by the Science Panel, and specifically wanted to know “of what” the 30-50% advice pertained. Satie described the percentage-based size recommendation, and explained that it referred to a target range of inclusion for each of the various representative habitat types being analyzed.

Linda Krop, referring to some of the tables in a handout comparing various habitat inclusiveness across a range of MRWG map alternatives, asked if some of the habitats analyzed were weighted differently than others. Satie responded that habitat types were not weighted differently, but that sometimes over- and under-representation of habitat types for a given alternative can appear to have a “balancing out” effect.

Lyn Kriger commented that in comparing the goal of Science Panel with the MRWG's problem statement, there seems to be a disconnect. She asked Satie Airame if it seemed like the reserve design was based more on a broad-based empirical approach, rather than solely trying to solve a fisheries management problem or crisis. Satie responded that yes, the design work was more precautionary in nature than based on solving a crisis.

Matt Pickett offered a clarification to everyone, reminding the SAC that the Science Panel had been given specific goals to work on by the MRWG, rather than developing their own.

Dianne Meester noted that when Satie had explained the suggested improvements the Science Panel offered to the MRWG for “Map B,” the size of the resulting modified map was not displayed on her slide. Satie replied that the percentage for that particular map was never calculated, and suggested that it was probably close to 32 or 33%.

Jon Clark commented that he understood the MRWG did not ask the Science Panel to evaluate the composite map, and noted that he thought the two mapped areas looked very similar to Maps E and I. Jon asked Satie if that was the case, and if the previous analyses for maps E and I could be looked at to get some idea of how the composite map might be evaluated. Satie responded that in fact Maps E and I are very close to the two areas on the MRWG's final composite map. She also took time to point out some of the areas that were different on these maps.

Bill Douros expressed that the Science Panel and others involved in this work deserve great commendations. He added that he could not think of any resource management process that he's ever seen which has been anywhere close to this well informed. Bill suggested further that it would be a crime if this work was lost, and urged the SAC to find a way to capitalize on this.

7. Socio-Economic Panel Report

Bob Leeworthy provided a presentation to the SAC that recapped the Socio-Economic Panel's involvement in the marine reserves process. Bob highlighted: the MRWG's socio-economic goals and objectives; the difference in roles between the SP and the Socio-Economic Panel (SEP); the user groups addressed in the study; the user groups for which there was no available data (e.g. non-consumptive activities by private boaters, passive use/non-use value of CINMS); the role of the MRWG's Fishermen's Data Review Committee and how the SEP worked with confidential data; various maps highlighting consumptive use (e.g. squid value distribution, charter boat fishing, private household fishing activity, consumptive diving activity); what was measured (e.g. ex-vessel values connected to employment models, consumer surplus or net value); and what was provided to the MRWG (overview of local economies, data distributions and exclusion zones, step 1 analysis of maps A, B, C and D). Bob presented the following slides:

Marine Reserve Working Group (MRWG) Socioeconomic Goal:

- To maintain long-term socioeconomic viability while minimizing short-term losses to all users and dependent parties.

Objectives (for the MRWG's Socio-Economic Goal):

- To maintain the social and economic diversity of marine resources harvest by equitably sharing the loss of access to harvest grounds among all parties to the extent practical when designing reserves.
- To address unavoidable socioeconomic losses created by reserve placement through social programs and management policy.
- To maintain the social and economic diversity of marine resources harvest by equitably sharing the loss of access to harvest grounds among all parties to the extent practical when designing reserves.
- To address unavoidable socioeconomic losses created by reserve placement through social programs and management policy.

Role of the Socioeconomic Panel:

- Simply advise MRWG on Socioeconomic Impacts of boundary alternatives for marine reserves.
- Socioeconomic Panel DOES NOT make recommendations.
- Socioeconomics Panel analyzes alternatives developed by MRWG and simply reports results.
- Socioeconomic Panel was constrained as to what user groups could be addressed and what measurements could be provided on each user group based on the body of available research and data.

User Groups Addressed:

1. Commercial Fishing and Kelp Harvesting
 - 14 Species/Species Groups that accounted for between 98.5% and 99.5% of the commercial ex-vessel fishing value from the CINMS.
2. Recreation Industry:
 - A. Consumptive Recreation:
 - (1) Charter/Party Boat (for hire) Fishing
 - (2) Charter Boat (for hire) Diving
 - (3) Private Boat (household) Fishing
 - (4) Private Boat (household) Diving
 - B. Non-Consumptive:
 - (1) Charter Boat (for hire) Whale Watching
 - (2) Charter Boat (for hire) Non-consumptive Diving
 - (3) Charter Boat (for hire) Sailing
 - (4) Charter Boat/Guide Service (for hire) Kayaking/Sightseeing

User Groups with No Available Information:

1. Private Boat (household) Non-consumptive Diving
2. Private Boat (household) Whale Watching
3. Private Boat (household) Sailing
4. Private Boat (household) Kayaking/sightseeing
5. Passive Use/Non Users

No Available Information:

- Many people have never visited the CINMS and many may never plan to visit the CINMS, but would have positive economic value (willingness to pay) to see areas protected as marine reserves.
- Existence Value – willingness to pay an amount just to ensure that something is protected in a certain state.

- Bequeath Value – willingness to pay an amount to ensure that heirs have the ability to experience something protected in a certain state.

What Was Measured?

1. Commercial fishing
 - A. Ex vessel Value (revenue the fisherman receives). Mapped into 1-by-1 mile grids for 14 species/species groups, plus kelp.
 - B. Total income and employment generated in each of seven counties from Monterey to San Diego County (includes full multiplier impacts).
 - C. Profiles of Sampled fishermen
 - (1) Experience (Years of Commercial fishing, Years Commercial fishing in CINMS, and Age of fishermen)
 - (2) Education (Years of Schooling)
 - (3) Dependency on Fishing (Percent of Income from Fishing, Percent of Fishing Revenue from CINMS and Number of Crew and Family Members supported by fishing operations)
 - (4) Ownership/Investment (Boat Ownership and Replacement Value of boat and Equipment)
 - (5) Residence (City and State)
 - (6) Ports Used (Home Port, Main tie-up, and Main Landing Port)
- Separate profiles for Squid/Wetfish Fishermen and All Other Fishermen.
- For Squid/Wetfish, further separated between Purse Seiners and Light Boats.

What Was Measured?

2. Recreation Industry:
 - A. Person-days: One person having done the activity any part of a day. Mapped at 1-by-1 mile grids.
 - B. For Charter/Party Boat/Guide Services, revenues, costs and profits.
 - C. For all persons recreating, spending by expenditure category in each county from point of access.
 - D. Spending translated into total income and employment impacts in each of three counties (Santa Barbara, Ventura, and Los Angeles). This includes full multiplier analysis.
 - E. Consumer's Surplus – amount of value received by a consumer over and above what the consumer pays for a good or service. Here a net return to the natural resources of the CINMS.
 - F. This is done for both consumptive and non-consumptive recreation, but non-consumptive recreation has different interpretation. Non-consumptive users are not displaced from marine reserves, so the estimates for this group do not represent potential losses. Nonconsumptive users are potential beneficiaries of marine reserves.

What Have We Provided To The MRWG?

1. Overview of the Local Economies – GAP Analysis of Available Socioeconomic Data and Research.
2. Data Distributions and Exclusive Zones: Commercial Fishing – Recreation. (Maps of activities and descriptions of samples and population).
3. Step 1 Analysis of Alternatives A, B, C, D.
4. Workshop with Commercial fishermen and several members of environmental groups using maps and economic tools to assist in designing additional map alternatives.

5. Step 1 Analysis of several official and unofficial MRWG Alternatives (Alternatives E, G, I, J, M and separate components of Alternative J).

Economic Impacts of Alternatives (Phase 1 example):

Table 3.2 Economic Impacts of Alternatives on Activities in the CINMS: All Counties – Total Income

Activity	Alternatives			
	A	B	C	D
	Total Income	Total Income	Total Income	Total Income
Consumptive Recreation	\$21,287,123	\$14,570,722	\$9,376,266	\$2,373,632
Commercial Fishing & Kelp	\$34,100,659	\$21,843,169	\$10,841,801	\$1,339,305
All Consumptive Activities	\$55,387,782	\$36,413,891	\$20,218,067	\$3,712,937

Step 1 of Analysis assumes all activity in closed areas is lost. No mitigating or off-setting factors are considered. Other management strategies and regulations that might further increase losses are not considered.

Following Bob's presentation, the SAC asked several questions.

Regarding the Phase 1 economic impacts estimated for various consumptive interests, Linda Krop asked if the totals generated reflected industry-wide estimates or merely the estimated maximum potential loss within the CINMS. Bob responded that the estimated impacts only reflect possible losses within CINMS.

Lyn Krieger commented that it seems unfortunate that all of this data is coming to the SAC now, near the end of the process. She remarked that there were some inaccuracies within the data, such as low counts on the number of charter operations. She said that there was talk about getting people together that could help to conduct a poll on this, but now it seems too late. Lyn asked if a meeting between the Socio-Economic Panel and fishermen (that Bob had mentioned earlier during his presentation) had been announced to the public via the Sanctuary's web site, just as other SAC Working Group meetings are. Bob replied that the meeting was not announced or advertised because it was much less formal.

Bruce Steele added that a group of fishermen involved with the MRWG process were just meeting to talk about maps, and asked the economists to attend and help out with understanding the potential impacts of various reserve options. Lyn responded that this was unfortunate.

Jeanette Webber asked Bob what percentage, overall, are the maximum potential losses to industries likely to be (not just within CINMS). Bob replied that they were not able to develop net effect numbers for specific industries, noting that it's not always possible or valid to extrapolate to the larger population when a complete census of uses within the study area is not obtained. Bob also suggested, however, that some of the fisheries actually take most of their catch from within the CINMS. Jeanette responded that the difference between CINMS-specific and industry-wide impact estimates is very important.

Robert Duncan asked a series of questions related to comments Bob had made about the benefits of marine reserves and sanctuaries to non-consumptive users. Bob, and his partner Peter Wiley, attempted to explain the concept of non-use value as it related to what people were willing to pay

(the value they would place) to know that a specific area is protected as a national marine sanctuary (one level of protection) or as a no-take marine reserve (a higher level of protection). The differences in levels of protection provided between a national marine sanctuary and a marine reserve would, the economists said, potentially provide for a difference in non-use value attributed to each. However, it was noted again by Bob that in this study they were not able to provide an estimate of non-use value for marine reserves.

Matt Cahn added that it seems like the main point is that while the estimated costs associated with this type of action can be calculated, it is very difficult to measure the kinds of social benefits Bob was speaking of.

Eric Hooper asked Bob if, in the ex vessel-based calculations of impacts to various commercial fisheries, a multiplier was also utilized to estimate total impacts. Bob replied that yes, multipliers were used.

8. SAC Discussion

Dianne Meester asked the SAC if, at this point, the Council would like to hear comments from MRWG members.

Bruce Steele suggested that right now the SAC needs time to discuss issues, and noted that the group was already running behind schedule.

Lyn Krieger suggested that the SAC move ahead with the agenda as planned. Dianne Meester called for all in favor to state “yes,” which everyone did. Upon Dianne’s call for those opposed, no-one replied.

Jon Clark offered a motion that called for the SAC to thank and officially disband the MRWG at this point, relieving them from further duties. The motion was seconded by Dianne Meester. Craig asked for a clarification on the motion. After some discussion, the motion was passed by unanimous consent.

Bruce Steele asked Council members to consider where the MRWG had been in their negotiations with respect to maps C and I. Bruce placed both of these maps on the overhead projector, and proceeded to explain their similarities and differences. He noted that the two maps are quite close in design, but that map I was said to be weak with regard to connectivity among reserve sites. Bruce suggested that a good way to process might be to think about these two maps and how they could be modified to meet the MRWG’s goals. Bruce strongly suggested that the SAC not “punt” all of this information to the next decision-making body. Bruce added that he thinks that SAC should at least pass judgment on whether or not the MRWG process was fair. He went on to point out that commercial fishermen went way out there to be fair, noting that the significant reserves areas on the west end of the island chain represented their contribution. But on the east end, Bruce said, the reserve proposals are weak, and that is not the fault of the commercial fishermen.

Linda Krop stated that she did not feel comfortable with the SAC forwarding only the MRWG's composite map. She also said that she felt the SAC should not, with only two meetings left to work with, try to reopen and complete the MRWG's two-year process. Linda recommended that the SAC agree to forward the information from the process and ask the Fish and Game Commission and Pacific Fisheries Management Council to consider taking action. She added that she would recommend passing on maps A through I, but not the composite map because it is confusing.

Brian Baird stated that he is amazed at the process overall, and the technical capabilities of it. He said that he has never seen anything like this with respect to the level of detail investigated, and the ability to analyze. He added that the Fish and Game Commission will undoubtedly receive more information on this than ever. Brian also said it would be difficult for the SAC to jump in like the MRWG. Posing a question for CINMS and the Dept. of Fish and Game, Brian asked if it is possible now for the agencies to craft a recommendation. Matt Pickett replied that it would be possible for CINMS to work on developing a final recommendation. Patty Wolf said that for the Department of Fish and Game, it is at this point premature for the agency to craft a recommendation. She added that she plans to deliver all of the information to the Fish and Game Commission because it would be invaluable to them.

Craig Fusaro reminded everyone of the process steps from here forward that were originally envisioned when it was expected that the MRWG would deliver to the SAC a completed consensus recommendation package. He asked if the plan is still holds true that CINMS and DFG will go forward with a recommendation to the Fish and Game Commission. Patty Wolf replied that, yes, the plan is still for CINMS and DFG to go forward together to the Fish and Game Commission. However, she stated that it is yet to be determined if the agencies will put forward a recommendation. She added that she is not clear yet what form a recommendation or delivery of information might take.

Linda Krop offered a motion calling for the SAC to forward to CINMS the information that came out of the MRWG process. Brian Baird commented that this should not be done prior to the evening public comment period. Linda Krop then withdrew the motion.

Bob Warner said that he was unclear about the role of the Pacific Fisheries Management Council (PFMC) in setting aside no-take zones. Matt Pickett said that PFMC must bless this for the federal waters portion of the CINMS, and then NOAA can act. Mark Helvey added that he was not familiar with the specifics for PFMC closures within national marine sanctuaries.

Bill Douros shared with the SAC his understanding of the role of PFMS and the NMSS with respect to no-take zones within sanctuaries. In federal waters, Bill explained, PFMC can adopt closures for the species that they manage. Bill said that within national marine sanctuaries, PFMC has a larger role they can play. Within a national marine sanctuary, Bill said, PFMC could implement a no-take zone, compliant with the National Marine Sanctuaries Act. Bill added that the NMSS could propose a marine reserve within a sanctuary anyway, even if PFMC disagrees, and then the Secretary of Commerce would receive the issue.

Mark Helvey pointed out that the CINMS designation document seems to run counter to that, because it says the Sanctuary will not manage fisheries. Bill replied that, yes, the designation document says that, but a marine reserve could still be designated if PFMC approves.

Jon Clark asked CINMS and DFG if a map, should one be developed by the SAC, would make a difference to the agencies at this point. Matt Pickett replied that it could possibly help, but it's premature for him to be able to know right now.

Dianne Meester asked if the three process review questions the SAC had intended to address were still appropriate given the circumstances. She repeated the questions: Did the MRWG accomplish their assigned task; Did the MRWG consider input from their technical panels; Was the process fair. She suggested that perhaps a better focus for the SAC at this point would be to determine what should be forwarded.

9. MRWG Member Comments

MRWG members in attendance were given an opportunity to address the Council. The following members spoke:

- Bob Fletcher commented that he strongly disagreed with the Science Panel recommendations, noting that it seemed to overwhelm the use of all other management tools in a non-crisis situation. He warned that following the advice of the Science Panel would bring economic injury to many people, and urged the SAC to look beyond the advice of the Science Panel.
- Steve Roberson said that he would be disappointed if there was not a SAC recommendation on marine reserves. Steve also commented that there was no question on the MRWG about the need for some reserves at the islands. He urged the SAC not to “roll over” the opportunity to the state’s Marine Life Protection Act.
- Greg Helms explained how MRWG members were not really supposed to possess outright veto power in the negotiations. Greg commented that he did not think the SAC could do now what the MRWG couldn’t accomplish in two years, and suggested that the SAC should act to forward the MRWG’s information and findings to CINMS but not tamper with the maps. Outside of the MRWG process, Greg said, there is a continuing interest among many of the participants to continue work on narrowing differences. He suggested that the SAC should give Matt Pickett and Patty Wolf the opportunity to keep working on the recommendation.
- Harry Liquornik reminded Matt Pickett and Patty Wolf that this is a community-based process, and he, like Greg, would like to continue to work on this.
- Shawn Kelly urged the SAC to follow the best available science regarding marine reserves, and to respect that there are federal and state laws that support such an approach. Shawn added that marine reserves are a fisheries management tool, and suggested that what is needed now is for a clear step to be taken with implementation of reserves that then can allow other evolving management approaches to adapt.
- Michael McGinnis explained his reasoning for leaving the MRWG in February, 2001, noting that he suspected special interest groups would generally dominate the process. He

strongly urged the SAC to stand behind the science today, suggesting that it would be enough to begin the long process of protecting the ecosystem.

Just before the meeting's dinner break, Chris Henson from the office of Lois Capps read a letter from the Congresswoman. All SAC representatives received a copy of the letter.

10. Public Forum

A. Welcome and Introduction

Dianne Meester welcomed the audience of approximately 300, and briefly explained the agenda for the evening. Matt Pickett briefly explained who the SAC is, who the MRWG is, and the role of the Science Advisory Panel and Socio-Economic Panel. He also provided a brief explanation of the two-year marine reserves process, leading up to where we are at today.

B. Facilitators Report on Marine Reserves Working Group Process

John Jostes, MRWG lead facilitator, provided a summary of the "Facilitator's Report" on the marine reserves process. John traced the history and process of the MRWG, and highlighted significant MRWG areas of agreement and disagreement. The public was provided with a summary handout that described the process and summarized the MRWG's mission, problem statement, goals, implementation recommendations, and unresolved issues (reserve size, reserve location, use of limited take areas, relative weighting of advice from Science Panel and Socio-Economic Panel, phasing of reserves over time, integration of reserves into existing fisheries management). The public's handout also provided the final MRWG "composite map," a list of MRWG and technical panel members, and information on future meetings.

The slides John used for this presentation are as follows:

Lack of Consensus ≠ Failure of the Process

Substantive Areas of Agreement:

- Ground Rules
- Mission Statement
- Problem Statement
- Issues of Concern
- Goals and Objectives
- Implementation Recommendations

Ground Rules and Consensus

Consensus Defined: Consensus is a process used to find the highest level of agreement without dividing the participants into factions. Everyone in the group supports, agrees to, or can accept a particular decision. In the end, everyone can say "whether or not I prefer this decision, above all others, I will support it because it was reached fairly and openly."

When unable to support a consensus, a member has an obligation to demonstrate that the item at issue is a matter of such principle or importance that his or her constituents' interests would be substantially and adversely affected by the proposed decision.

Issues of Concern:

- Companion Piece to Problem Statement
- Link to Goals and Objectives

Goals and Objectives:

Developed to answer the questions of:

- “what” is the desired future state of the Channel Islands marine ecosystem,
- “what” are the measurable outcomes for evaluating progress and success in moving toward that future desired condition.

Substantive Goals:

Ecosystem Biodiversity Goal: To protect representative and unique marine habitats, ecological processes, and populations of interest.

Socio-Economic Goal: To maintain long-term socioeconomic viability while minimizing short-term socioeconomic losses to all users and dependent parties.

Sustainable Fisheries Goal: To achieve sustainable fisheries by integrating marine reserves into fisheries management.

Natural and Cultural Heritage Goal: To maintain areas for visitor, spiritual, and recreational opportunities which include cultural and ecological features and their associated values.

Education Goal: To foster stewardship of the marine environment by providing educational opportunities to increase awareness and encourage responsible use of resources.

Implementation Recommendations:

Monitoring, Evaluation, and Assessment Recommendations:

- For Biodiversity
- For Fisheries Management
- For Socioeconomic Impacts
- For Data Management

Reserve Administration Recommendations:

- Agency Coordination and Accountability
- Community Oversight
- Funding
- Enforcement
- Education Recommendations

Outstanding Unresolved Issues:

- What the MRWG could not agree upon:

- Size of Reserves
On this, John noted that “one side’s gain, was another’s loss.” He also commented that “people used their veto power” here.
- Location of Reserves
- Use of “Limited Take” areas to compliment or substitute for “No Take” Reserves
- Relative Weighting of Advice from Science Panel and Socioeconomic Team
- Phasing of Reserves
- Integration of Fisheries Management Outside Reserves

Principles Embodied in Process:

- Diversity of Representation
- Commitment of the Participants to the Process
- Ability to Respond to a Loss of Membership
- Process Flexibility
- Use of Advisory Panels
- Strategic Use of Public Comment/Input
- Stakeholder Understanding of the Science and User Profiles
- Behind Marine Reserves
- Stakeholder/Constituent Outreach
- Need for Process Evaluation

Added Value as viewed by MRWG:

- From consideration to action
- Everyone got smarter
- Building consensus requires an exceptional amount of work
- The end of our process will be where others start
- Created a broader knowledge base
- Better working relationships

C. Public Comment Period

The public comment period provided 79 individuals with 2 minutes each to speak.

A summary tally of suggestions and main points raised is as follows:

- 25 comments urging the SAC to specifically support the Science Panel’s 30-50% marine reserve recommendation
- 18 comments generally urging the SAC to act by supporting marine reserves
- 10 comments urging the SAC to specifically recommend Map B
- 4 comments asking that free diving be respected as a sustainable fishery, and exempted from reserves
- 3 comments urging SAC to recommend a marine reserve proposal of at least 50% closure area

- 2 comments suggesting that “small” reserves or the MRWG “areas of overlap” be implemented first, and then monitored for performance
- 1 comment suggesting that the SAC recommend a marine reserve proposal of 40-45% closure area
- 1 comment suggesting that the SAC forward a proposal on the three western islands, noting that ACI and SBI were not dealt with
- 1 comment suggesting that the SAC forward only Maps E and I
- 1 comment suggesting that two islands be closed and two left open
- 1 comment suggesting the SAC forward three proposals: a SP-endorsed map, the MRWG areas of overlap map, and a map that the SAC likes
- 1 comment suggesting the SAC should forward only what it received from the MRWG and technical panels
- 1 comment expressing concern about unfair impacts on recreational fishermen
- 1 comment suggesting that methods other than marine reserves be considered
- 1 comment suggesting that more work should be done on artificial reefs
- 1 comment suggesting the SAC ask for more time to work on this
- 1 comment expressing concerns about enforcement issues
- 1 comment expressing concerns about the validity of the science used
- 1 comment asking the SAC to remember this evening as a clear mandate to act

The public speakers, and a summary of their comments, follows:

1. Jean Michel-Cousteau. This process is history in the making. The MRWG’s outcome is not a negative result. The eyes of the country and the world are upon us. The state and the CINMS have an opportunity to do the right thing. This is a monumental achievement. Getting people with such diverse interests to work together and talk like this is incredible, and I am touched. Reasonable people can find a way to do this. We must now follow through to take action that will provide long term protection and minimize economic impact. This is right for the ocean and for marine life. Congratulations and thank you.

2. Richard Charter. There is a long history in this country of protecting parks and special places. CINMS is one of those special places. I was part of the efforts to designate CINMS. At that time, oil threat was key concern. Thanks the commercial fishermen for embracing the Sanctuary. Never could have known at that time we’d see the declines we have today, or that we’d be here. The MRWG came very close. This process is unprecedented. Bring the data together in a better form before you go to the Fish and game Commission. Come up with a 5-island proposal.

3. John Fuqua. The maps you’ve received are misleading. The Science Panel gave you a recommendation, even though you didn’t ask for it. You have a lot of people’s lives and livelihoods in your hands. The Marine Life Protection Act process is there is you can’t make a decision.

4. Giselle Keating. We need to preserve it to understand it. A 30% closure is the least we can do.

5. Fred Hollander. I will speak for Santa Barbara island. This island should be looked at in a special light, because it is already surrounded by closures. Very little is open now. That island is protected already. How many of you have even been there? That's our primary place, so leave it open. I heard someone say it should be protected for cormorants – protected from what?
6. Frank Sullivan. The closures outlines will have more impact on sport fishing than commercial. In the socio-economic study, less was made of impacts to sport fishing than is accurate. If it becomes unattractive for recreational fishermen to live here, they will take their money and go somewhere else. I value the Channel Islands deeply. Let's find another way.
7. Joel Greenberg. The problem here seems to be that recreational anglers have lost sight of the problem. We hear about depleted fisheries, but we don't get to see the real data. Commercial fishing has had the largest impact. Less recreational angling licenses are being sold today. The money to fund reserves will need to come from this. Follow the money. Make large conservation areas, and recreational anglers will even pay to fish it.
8. Steve Shimek. It is time to be courageous. Don't dodge this. To just pass on the decision is wrong. It's our sanctuary. Would guess that all reserves have been objected to, at first. Endorse the Science panel recommendation – it's the most defensible position. Critical habitat of giant kelp needs to be set aside, on the order of 30-50%. Map B is the only proposal that does this.
9. Dr. Michael McGinnis. I left the Marine Reserve Work Group on Feb 20th of this year. I began to suspect that an authentic effort to restore the meaning of sanctuary was threatened by the general domination of this process by special interest groups. Special interests want to impose the silence of servitude, and want to break from the science and environmental laws. I realized that this process had become the mere grinning ghost of the lost community, that we have a fake sanctuary, and that the sanctuary is not protected. This community has been on the coat tails of this process. Fishery interests will continue to dominate this process. We need to return to the facts; this community needs to move in front of this process, and begin to create a new sanctuary. The SAC has one choice: to accept the best available science. It supports state and federal mandates. I hope that the community will become more united. Anything less than 30% is a fake proposal for a fake sanctuary.
10. David Wass. I am the conservation chair of the Santa Barbara Audubon Society. His doctor told him that his arm was sore because he had overtaxed his resources, and that he needed to take it easy. We need to take it easy on the resources. Audubon say to follow the recommendation of the Science Panel. 160 scientists signed a consensus statement in support. We should have at least 50% no take zones. We're not doing anything about population. Too bad we're not eating each other.
11. Walt Bottelsen. 35 year resident of Santa Barbara, and fishes everywhere. I'm for people to catch fish, everywhere. We've blocked streams along the coast, and there's too many people. So, we have to go fishing at the islands now. Put in fish houses and artificial reefs to take pressure off the islands.

12. Joelle Anderson. The Science Panel recommendation is essential to achieving the MRWG goals set for reserves. For protection of ecosystem biodiversity and sustainable fisheries, we need to reply on the Science Panel recommendation.
13. Diane Conn. The ocean is a part of her everyday life. Like to eat fish, but sometimes worry she will eat the last one. Will we act now to protect our habitat, or will we continue to steal the resources? We need you to act to protect the marine resources. CINMS belongs to all of us. Use is a privilege, not a right. We want marine reserves. Please act.
14. Dan Fontaine. Wilderness on land and in the sea enhances his life. Wouldn't want to be a fisherman with a family and have to stop. Want to support strong reserves. Prefers map B or B/C.
15. Terry Schuller. Has been diving the Channel Islands for 30 years. Like to dive at the Anacapa marine reserve, because sees an abundance of life. Urged SAC to adopt a 50% reserve.
16. John Gallo. With the Conception Coast Project. There are many problems we're confronting here, but there's hope. He envisions a sustainable planet. The world is watching. Send a message loud and clear. We need innovative policies to protect our fishermen. Be creative. We can adjust. Be strong, and make history.
17. Scott Bull. Supports science –based marine reserves that provide long term protection over short term gain.
18. Dave Reid. Take the Science Panel's advice. We must in order to sustain the resources.
19. Laura Losito. Used to see whit and green abalone, but people will never see them again. Hate to see this happen to other species. Take action to prevent this.
20. Melissa Mallory. Fears for the well-being of the coastal environment and the CINMS. There should be reserves in each province, and on both sides of each island. There should be a reserve on the east end of Santa Cruz island. Don't want to see a decline in California sea lions. Follow the advice of the Science Panel.
21. Ken Pereira. Preservationists want a solution here, and soon. Industry is not interested in an agreement. To delay or postpones means there will not be regulations. Follow the advice of the Science Panel. Industry already stopped the MRWG, don't let them stop you.
22. Craig Revell. Defers his recommendation to the scientists. Reserves can work to the benefit of all, to sustain fish populations. A 30-50% closure is the way to do it. Encourages SAC to take a responsible role and follow the science on this. Be visionaries.
23. John Ucciferri. When studying fisheries at Woods Hole on the east coast, he learned about the fishery problems at Cape Cod. This is a sad example, and it could happen here. We need at least two reserves off every island, and at least 40-45%.

24. Mike Summers. We have highly consumptive ways. We don't get many chances like this. We need to be in harmony with the environment. Unfortunate losses will come to fishermen. But it's important to do the right thing here, for our kids.

25. James Studarus. He's here on behalf of the species. Is here to protect marine life and a way of life. Marine reserves are the answer. The SP advice is the key. Option B is the best. Option B will sustain and enhance fisheries. Make the right choice.

26. Philip Tseng. Consensus was impossible on the MRWG. Imagine that you are not part of a special interest group – what would you do? It's not too late. Look at the science. Option E was stupid, and won't make it. Option B is better.

27. Ariana Katovich and Maggie Stack. They played a video to the SAC. The video featured clips of many young people commenting on their concern for the marine resources of the Channel Islands, and their support for the establishment of marine reserves.

28. Wayne Chapman. A freediver. The islands have been fished for a long time. Freediving is different, and sustainable. Freedivers should be applauded for being sustainable.

29. Nathaniel Acosta. A freediver. Give us a chance to keep diving. We are sustainable. Don't penalize us. Reserves will also be dangerous for us.

30. Cindy Lowry. Director of the local Sea Otter Defense initiative. Distributed a letter to SAC members. Is opposed to seeing this recommendation woven into the MLPA. The science on this is overwhelming. 30-50% is right. Support map B.

31. Jeff McMillan. Need to support the science on this.

32. Phil McKenna. The process was partially flawed because it did not consult with the fish. Our fish and children would applaud you if you fully supported science-based marine reserves.

33. Robert Ellis. The science indicates that reserves will work. Need reserves on both sides of each island. The Channel Islands are public property. Map B is good, but not good enough. CINMS belongs to all of us. Urged the SAC to act now.

34. Ron Takeda. A long-time resident of Santa Barbara. Goes to the Channel Islands weekly to freedive. These are primitive methods. Freedivers are very selective. I hunt for the fish I eat, while you buy yours at the grocery store. I do support reserves, even as a freediver. But recognize us as a sustainable fishery. Listen to us when you set the reserve boundaries.

35. Michael Sherwood. Supports reserves. 30-50% is mandatory. Reserves must represent all three provinces. The scientific data is clear. Listen to the community and the science.

36. Brian Long. Representing recreational fishermen. Suggests SAC forward all the maps and information to CINMS. See a battle between sport fishermen and environmentalists that should not be. Fishermen are not against conservation. Another method, other than reserves, should be considered.

37. Marc McGinnes. None of us want to do irreversible damage. The best way to avoid that is to be cautious and use care. Rejects the notion that science has all the answers, but accepts the Science Panel recommendation in this case. 30-60% is necessary. Do it.
38. Ralph Goldsen. A spearfisherman. Supports 30% closure, despite the impact it will have on him. There's a limit to the application of democracy for something like this. If you were playing "Millionaire" and a question on this came up, you'd call a scientist. Listen to the scientists.
39. Paul Weakliem. A diver. Take the area of overlap as a starting point, add a little more, then go forward. Set aside some of Anacapa Island to see what impacts recreational fishing really has.
40. Peggy Oki. Is encouraged by the support. Has learned about spillover effects and bycatch problems. Won't be eating too much fish anymore. Listen to the Science Panel.
41. Cory Gallipeau. The mandate of CINMS provides important guidance that should be used here. The MRWG's work should not be wasted. Look at the goals and objectives. Knows there's a difference between ideal and real. The responsibility for this should rest with all of us. Option B is the best.
42. Nicole Calmels. Can sympathize with the fishermen. CINMS belongs to the public. Young people are the future. Consider what Mike McGinnis said. Respect the Science Panel advice. A and B are the only maps that meet the criteria. Fulfill your responsibility to the community.
43. Aila Malik. Is reminded of the story of the Tragedy of the Commons. Can sympathize with the fishermen. Let's not create another tragedy of the commons here.
44. William Olkawski. A retired biologist. Eats fish. If 30-50% is a good range, then 50% should bring faster recovery of the resources. Thought that he read somewhere that small and scattered reserves are supposed to be a better design, but is not seeing that here. Is concerned about fishing impacts.
45. Joshua Jackson. Thanked everyone for their hard work. Supports the establishment of marine reserves, and the Science Panel recommendation of 30-50%.
46. Alissa Pfof. Surfer and diver. We're all in this together, and we're all interconnected. We have an absolute treasure in the Channel Islands. Supports the immediate establishment of marine reserves at CINMS.
47. Eric Kett. Freediver, diver, long-time resident, loves the islands. Has spent over 2000 days at sea. He tries to find and know all the reefs at the Channel islands. These places are not the barren wastelands that some would have you believe. Lacking in the MRWG process was personal knowledge of the islands. The SAC can ask for more time on this. Remember that we all pollute. The islands need and deserve our respect. Reserves are a good idea, and we can do this right – with some additional time.

48. John Wascor. Don't see too much disagreement here. Think of yourselves as John Muir. Step up now and give a strong recommendation. Think about where the Channel Islands will be in 100 years. Supports map B.
49. Michael Smith. A personal guiding principle is to do no harm. Agrees with the science on this. Urged SAC to act consistent with the Science Panel's advice.
50. Kevin Parisot. Thanked the fishermen that were brave enough to speak out in favor of reserves. This should not be about "me," "mine," "I," etc. 30% does not seem like enough. Look at the science and do the right thing.
51. Chris White. The best thing to do here is to follow the science.
52. Kristina Webster. It's my sanctuary too. It brings me peace. Implement a network of marine reserves now to assure long term protection of the resources.
53. Sam Drucker. Don't let all this work go to waste. You must give some advice here. Present three alternatives: 1) a map based on the Science Panel advice; 2) the areas of overlap map; 3) a map the SAC likes best. Have seen reserves work at the Florida Keys National Marine Sanctuary. Biodiversity will improve. Remember also that "pretty close" to scientifically adequate is not scientifically adequate.
54. Inge Rose. Have dove at all eight Channel Islands. First dove in 1956, and was a game hunter. Have seen many changes over the years, and they are truly criminal. Farmers tend to the land, and we must tend to the ocean. Listen to the Science Panel's advice.
55. Matthew Bond. There should be special use of islands for freedivers. As a freediver, does not waste any of the resource. When he takes a fish, he uses the entire fish and completely appreciates it. It probably can't be quantified, but economic losses from reserves could be made up for by research grants.
56. Conner Everts. With South Coast Watershed Alliance. Appreciates how difficult this is. Can't imagine how hard this must be for fishermen and their families. Hopes we are not going to polarize the issue again. Concerned about too much consensus building in all of this. Has seen salmon declines and tragedies up north. This kind of thing could happen here. Look at the long term, look at the future.
57. Jeff Merek. Political Science student. Wants the SAC to make a decision with impact, and to show that we can work together successfully.
58. Alissa Firmin. Supports the Science Panel's recommendation for 30-50% closures.
59. Jenna Garmon. Urged the SAC to do everything in their power to do the right thing. We need reserves here, and world-wide. We have the opportunity now. The MRWG, SP, and SEP did produce valuable information and products to help us understand the local ecosystem and fisheries. Supports map B. We ignore science at our own peril. We have a choice to make now,

and a moral obligation to protect biodiversity. What is the meaning of a sanctuary if it can't have some ocean wilderness areas.

60. Bruce Trowbridge. Sportfisherman. Have attended many MRWG meetings and learned a lot. If you set up a reserve, positive change inside it comes fast. Little is know, however, about what happens away from reserves. Yes, there are some edge effects, but beyond that it is unknown. We should proceed on this with caution at first.

61. Kate Wing. Suggests that the SAC do nothing. Have watched the MRWG for two years, and don't want the SAC to go through this. We're so close now. Review what you've received, but don't reinvent the wheel.

62. Stephanie Garbs. Supports the establishment of marine reserves at the Channel Islands. Support a 30-50% closure, consistent with the Science Panel's recommendation.

63. Matt Rosen. This is precedent setting. Values the life of the species out there. Urged SAC to make the right decision.

64. Jeff Clark. Ventura water sports enthusiast. Supports the SP recommendation for 30-50%. Tired of polluted waters. Adopt a zero trash policy in our ocean. We eat mercury-traced fish, and reserves won't help with this. Supports reserves, but additional action is needed.

65. Chris Proudman. Has not been to the Channel Islands. We need to take responsibility for our abuses on the ocean. Is in full support of marine reserves.

66. Christopher DeMars. Avid diver. Channel Islands are a gem of the natural world. Would like to see all of it in a reserve, but the only same thing to do here is to follow the Science Panel advice of 30-50% closures.

67. Kelli McGee. With American Oceans Campaign (AOC), which has 30,000 members. We're all guilty of tinkering here, and so we need to save all the parts. AOC challenges the SAC and CINMS Manager to help save us from ourselves. The responsible step to take is that recommended by the Science Panel. Endorse it. Option B is best. Step up and make a stand.

68. Al Anderson. Dive boat captain. Has written letters of support for marine reserves. Concerned about not being able to go into a reserve with catch on board. Don't want to have this be the case. Have some trust in us.

69. Danielle Zacherl. Research diver. Let's make a huge area of the Channel Islands a reserve. Think about long term gains. Supports 30-50% closures.

70. Daniel Wilson. We are all borrowing from the Channel Islands. We need to think about how our decisions will effect seven generations from now. We can change to an eco-tourism-based economy. It's up to us. Have faith in the science on this.

71. Ahmet Dulut. We just have to make sure there will be fish left out there to argue about.

72. Dan Pearson. When Mike McGinnis left the MRWG, he lost faith in the process. Give two islands to the fishermen, two to the preservationists, and come back in a few years to see how we are doing.

73. Alan Sanders. With Sierra Club. Hopes the SAC will be bold. Maximize protection of this unique area. He is speaking from the late Jim Donlon's influence.

74. Giles Pettifor. This is a political process. Lobbyists will have their effects. Remember this evening. Has never heard a more clear mandate to act.

75. Michael Harrington. The work done should not be wasted. Suggests that reserves around the three western islands be presented now, and note that Anacapa and Santa Barbara Islands were not dealt with due to a lack of sufficient time. We have been trying to do in two years what took 10 years in Florida. There are very few unhealthy fisheries in California. When they are unhealthy, they are closed. Reserves are OK, but use them with integration with fisheries management. Urged the SAC to use a cautionary measure. Need more time spent on understanding socio-economic effects.

76. Jesse Swanhuysen. Make sure the SAC's absent public at large representatives hear what happened tonight, since they aren't clear on who their constituency is. Think about how history will look at us. We have an opportunity to do the right thing.

77. Elise Tanadjaja. Student and elementary school teacher. Her students love touch tanks. Kids know that oceans have problems. They know that marine life needs a safe home. We are all responsible for the children. Please give the marine life a big house – a big reserve.

78. Matt Lum. With the Seawatch Ocean Conservation Group. Thanked the MRWG for letting him participate. The MRWG was very close. Please pass along maps E and I, because the MRWG is somewhere between these two maps. The SAC role is likely that of a jury. Your duty is to look at these maps and areas, and to actually go out to these sites. He will help enforce the reserves. A 50% closure, however, would be a poacher's paradise.

79. Greg Feck. Scientists already seem to have complete control of the islands, through the Dept. of Fish and Game over the last 30 years. He knows that abalone did not decline due to fishing. We should all reduce hydro-carbon use. The Scientists are not necessarily objective. Fisheries could have been protected by DFG with other approaches.

NOTE: In addition to the oral testimony, 93 written comments were deposited in the public comment box. (all written comments on the marine reserves process are housed at the CINMS office in Santa Barbara).

Dianne Meester and Matt Pickett both thanked everyone for coming to the meeting and participating. Dianne informed everyone that the SAC will meet next on June 19.

The meeting adjourned at approximately 10:15 pm.

Meeting minutes respectfully submitted by:

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